

STATE OF NEVADA COMMISSION ON MINERAL RESOURCES

DIVISION OF MINERALS

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ALAN R. COYNER

Administrator

COMMISSION ON MINERAL RESOURCES DIVISION OF MINERALS

NEVADA EXPLORATION SURVEY 2001

by

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June, 2002

NEVADA COMMISSION ON MINERAL RESOURCES

Division of Minerals

The Nevada Division of Minerals, a part of the Commission on Mineral Resources, is responsible for administering programs and activities to promote, advance, and protect mining and the development and production of petroleum and geothermal resources in Nevada. The Division's mission is to conduct activities to further the responsible development and production of the State's mineral resources to benefit and promote the welfare of the people of Nevada. The seven-member Commission on Mineral Resources is a public body appointed by the Governor and directs mineral-related policy for the Division and advises the Governor and Legislature on matters relating to mineral resources. The Division focuses its efforts on three main areas: Industry relations and public affairs; regulation of oil, gas, and geothermal drilling activities and well operations; and abandoned mine lands.

The agency is involved in a wide array of activities relating to mineral development. Staff compiles annual data on all active mines in Nevada and maintains the State's mine registry. Information concerning mining operations and production is made available to the public through this yearly publication. Educational documents and materials concerning many aspects of the minerals industry are also produced. The Division participates in governmental activities affecting policies and laws concerning the minerals industry and resource development. The Division administers the State's reclamation bond pool.

The Division is responsible for permitting, inspecting, and monitoring all oil, gas, and geothermal drilling activities on both public and private lands in Nevada. Staff also monitors production of oil, gas, and geothermal resources to insure proper management and conservation. The Administrator is the Governor's Official Representative to the Interstate Oil and Gas Compact Commission.

The Division's abandoned mine lands program provides for public safety by identifying and ranking dangerous conditions at mines that are no longer operating, and by securing dangerous orphaned mine openings. The program continually urges the public to recognize and avoid hazardous abandoned mines.

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EXECUTIVE SUMMARY

This is the eighth annual survey conducted by the Division of Minerals of companies engaged in mineral exploration in Nevada. The purpose of the survey is to determine the level of current and projected exploration activity, and to determine what factors are influencing those levels of activity.

The highlights of the survey are as follows:

- Twenty four companies responded to this survey.
- The respondents reported spending \$51.2 million on Nevada exploration activities in 2001, and project spending \$46.3 million in 2002, a 10 percent decline. \$38.8 million was spent on expansions and \$12.4 million was spent on grass-roots efforts.
- The respondents reported their worldwide exploration expenditures in 2001 were \$204.3 million, and are projecting a drop to \$166.3 million in 2002.
- The respondents spent 75 percent of their budgets on actual exploration costs, 7 percent on corporate costs, 10 percent on land holding costs, 7 percent on permitting and compliance costs, and 1 percent on other costs.
- The respondents reported employing 108 geologists in 2001, down from the 125 employed in 2000. Projections for 2002 show a continuing drop to 101 geologists.
- The respondents reported holding 38,075 claims in Nevada and 39,772 in the U.S. as a whole in 2001.
- Commodity prices were the most important factor influencing the respondents' level of exploration activity followed by the existence of favorable geology.
- The time required for respondents to obtain approval of an exploration plan of operations varied from 3 months to 21 months with an average of 10 months, down from an average of 13 months in 2000.
- Three out of 12, or 25 percent of respondents who have Nevada production were able to replace their production with newly found reserves.
- Forty three percent of the respondents reported they were optimistic about domestic exploration, while 31 percent were neutral and 26 percent were pessimistic.

INTRODUCTION

In the spring of 2002, the Division of Minerals conducted its eighth annual survey of exploration companies engaged in projects or holding claims in Nevada. As in previous years, the purpose of this survey is to determine the current and projected levels of exploration activity, and to see what factors are influencing these levels. This survey is regarded as a portion of the official state mine registry, making the individual responses confidential.

Forty seven questionnaires were sent out in late January, 2002. Responses were received from 24 companies. The Division appreciates the efforts made by those who responded. All respondents were focused on precious metals exploration. Many, but not all, of the respondents to the surveys are the same from one year to the next. Due to mergers, some respondents to previous surveys no longer exist. This means that comparing trends is possible only in a general way rather than an exact way. Table 1 shows the number and types of respondents from previous surveys and this current one.

The main topics covered by the survey include exploration expenses and a breakdown of how the dollars were spent, geologists employed, number of claims held, a ranking of factors that influence respondent's levels of activity, success at reserve replacement, type of reserve replacement, and overall attitude toward domestic exploration.

The Division appreciates the efforts of Jonathan Price, State Geologist, for his critical review of the manuscript. Thanks is also due to Deborah Selig and George Bishop of the Division of Minerals.

EXPLORATION EXPENDITURES

Exploration expenditures are regarded as one of the two main indicators of exploration activity, the other being the number of geologists employed. Exploration expenditures reported for Nevada for 2001 totaled \$51.2 million, down significantly from the \$76.9 million reported for 2000. The actual reported expenditures for 2001 were less than the \$59.4 million that had been projected to be spent in 2001. In this current survey, the respondents project their Nevada exploration spending will be \$46.3 million in 2002. If this projection holds true, it would mark the sixth consecutive year of declining exploration expenditures in Nevada. Exploration spending remains important to Nevada's economy, particularly in the rural areas, but these figures indicate a great deal of belt tightening has taken place. Many companies no longer exist as a result of mergers, further contributing to the decline in exploration spending.

Spending in the rest of the U. S. (non-Nevada) in 2001 was reported to be only \$1.9 million, down very sharply from the \$23.5 million reported for 2000. The respondents project their non-Nevada U.S. spending will drop even more, to \$1.7 million in 2002. It should be pointed out that there is a Nevada bias in this survey as companies without known Nevada activity are not polled. Spending in Nevada was 96.3 percent of the total U.S. spending in 2001,

up from 76.6 percent in 2000. Even though the actual amount of domestic spending is lower than previous years, the respondents are focusing virtually all of their U.S. efforts in Nevada.

Respondents reported that their worldwide spending was \$204.3 million in 2001, down sharply from the \$346.4 million reported for 2000. Projections for 2002 show a continuing drop, to \$166.3 million. Spending in Nevada was 25.0 percent of the respondent's worldwide spending in 2001, up from 22.2 percent in 2000. Nevada's percentage of worldwide spending is projected to increase to 27.9 in 2002.

In most previous surveys, a distinction existed between the companies with Nevada exploration budgets greater than or equal to \$1 million (the GE companies) and those with budgets less than \$1 million (the LT companies). In this survey there is a gap of \$550,000 between the largest LT company and the smallest GE company. Graph 1 shows the distribution of respondent's budgets. Of the 24 respondents to this survey, 10 are GE companies and 14 are LT companies. The make up of the GE companies and the LT companies changes from year to year. In the previous survey there were also 10 GE companies, but some former GE companies have vanished due to mergers, and some former LT companies have become GE companies. The GE companies accounted for 96.7 percent of Nevada's exploration spending in 2001. The GE companies also account for the bulk of domestic and worldwide spending at 96.8 percent and 98.0 percent respectively. Graph 2 shows the breakdown of exploration spending for Nevada, the rest of the U.S., and the rest of the world for 2001 and the projections for 2002. Table 2 shows the exploration expenditures reported in previous surveys from 1994 to 2001.

The average Nevada spending per respondent was \$2.1 million in 2001, down from \$2.3 million in 2000. The GE companies spent an average of \$4.9 million while the LT companies spent an average of \$120,000. The projections for 2002 show the GE companies dropping to an average of \$4.4 million and the LT companies rising to \$149,000. The average spending for all respondents in 2002 is projected to be \$1.9 million. Graph 3 illustrates the average spending per respondent in Nevada, the rest of the U.S., and the rest of the world.

BREAKDOWN OF EXPENDITURES

In addition to the amount of spending, this survey asked respondents for a breakdown of their Nevada expenditures. This is the third year this information has been requested. Respondents were asked to provide the percentages of their budget that were devoted to landholding costs (claim staking and holding, lease payments, etc.), permitting and compliance costs (bonding, reclamation, etc.), corporate costs (overhead, taxes, etc.), actual exploration costs (drilling, mapping, assaying, etc.), and other costs (respondents were asked to specify). The percentages given by each respondent were weighed against that respondent's budget.

For all respondents together, 75 percent of their 2001 budget was spent on actual exploration, up from 66 percent in 2000. They spent 10 percent on land-holding costs, down from 11 percent in 2000, 7 percent on permitting and compliance costs, up from 3 percent in

2000, and 7 percent on corporate costs, down from 12 percent in 2000. Only 1 percent was spent on other costs, down from 8 percent in 2000.

For the GE companies as a group, 75 percent of their 2001 budget was spent on actual exploration, up slightly from 74 percent in 2000. They spent 10 percent on land-holding costs, the same as in 2000, 7 percent on corporate costs, down from 12 percent in 2000, 7 percent on permitting and compliance costs, up from 3 percent in 2000, and 1 percent on other costs, down from 8 percent in 2000.

For the LT companies as a group, 64 percent of their 2001 budget was spent on actual exploration, up from 45 percent in 2000. They spent 19 percent on land-holding costs, down from 27 percent in 2000, 13 percent on corporate costs, down from 14 percent in 2000, 4 percent on permitting and compliance, down from 12 percent in 2000, and less than 1 percent on other costs, down from 8 percent in 2000.

The GE companies continued to spend a higher percentage of their budgets on actual exploration than the LT companies. The LT companies spent a higher percentage on landholding costs than the GE companies. Graph 4 shows the expense breakdown for all respondents, GE respondents, and LT respondents.

GEOLOGISTS EMPLOYED

The second main indicator of exploration activity is the number of geologists employed. In Nevada, respondents reported 107 geologists on the payroll in 2001, down from the 125 reported for 2000, but higher than the 91 who had been projected to be employed by the previous survey. Respondents to the current survey project 101 geologists employed in Nevada in 2002. Of the 107 geologists at work in Nevada in 2001, 92 were employed by the GE companies and 15 by the LT companies. Graph 5 shows the number of geologists employed in 2001 and projected to be employed in 2002. Table 3 shows the number of geologists employed in the previous surveys from 1994 to 2001.

In the U.S., including Nevada, 118 geologists were reported to be at work in 2001, down from the 158 reported for 2000. Of those, 98 were employed by the GE companies and 20 were employed by the LT companies. Nearly 94 percent of the domestic geologists employed by the GE companies were employed in Nevada, compared to 75 percent for the LT companies. Overall, 91 percent of domestic geologists were at work on Nevada projects. Projections for 2002 domestic geologist employment show a decrease in overall numbers but an increase in Nevada's percentage. The GE companies project employing 90 domestic geologists in 2002 and the LT companies project employing 18 for a total of 108. Ninety six percent of the GE company's domestic geologists are projected to be at work in Nevada in 2002, compared to 83 percent for the LT companies and 93 percent overall.

Worldwide, including the U.S., respondents reported 208 geologists at work in 2001, down from the 318 reported for 2000, and considerably down from the 782 reported for 1999. Of the 208 worldwide geologists employed in 2001, 173 were employed by the GE companies and 35 by the LT companies. Overall, 51 percent of the reported worldwide geologists were at work in Nevada in 2001. The respondents to this current survey project employing 201 geologists worldwide in 2002 of which 50 percent will be at work in Nevada.

EXPENDITURES PER GEOLOGIST

Both expenditures and geologists employed for 2001 were lower than what was reported for 2000. The decline in expenditures was, in general, sharper than the decline in employment, causing the expenditures per geologist to decrease in 2001 compared to 2000. For all respondents in 2001, in Nevada the average spending per geologist was \$478,000 compared to \$615,000 in 2000. The GE companies spent more per geologist in 2001 (\$538,000) than the LT companies (\$120,000). Projections for 2002 show the GE companies spending \$515,000 per geologist, the LT companies spending \$149,000 per geologist and \$459,000 per geologist overall.

Domestically, including Nevada, the spending per geologist for 2001 was lower than 2000 at \$525,000 for the GE companies, \$84,000 for the LT companies, and \$450,000 overall. Domestically, excluding Nevada, the spending per geologist was much lower at \$323,000 for the GE companies, only \$1,000 for the LT companies, and \$177,000 overall.

Worldwide, the expenditures per geologist for 2001 were higher than in Nevada at \$1,158,000 for the GE companies, \$116,000 for the LT companies, and \$982,000 overall. Projections for 2002 show the GE company's spending per geologist dropping to \$967,000 and the LT company's spending per geologist rising to \$189,000, which works out to an average of \$827,000 overall.

MINING CLAIMS

The number of mining claims held in Nevada and the rest of the U.S. has dropped steadily since the enactment of the \$100 federal claim maintenance fee in 1992. As of September 1, 2001, according to the Bureau of Land Management, there were 93,598 active claims in Nevada compared to 105,848 claims as of September 1, 2000. Graph 6 shows the number of claims held in Nevada according to the BLM from 1993 to 2001 and the average gold prices for those years.

Respondents to this survey reported holding 38,075 claims in Nevada and 39,772 in the U.S. as a whole in 2001, compared to 46,112 and 55,230 respectively, reported in 2000. Projections for 2002 show this trend continuing, with respondents planning to hold 36,362 claims in Nevada and 37,941 in the U.S. as a whole. The GE companies held 86 percent of all of the

respondents' Nevada claims in 2001, with 32,696 claims compared to 5,379 for the LT companies. In all of the U.S., the GE companies held 33,350 and the LT companies held 6,422.

Overall, the respondents reported that 96 percent of all their U.S. claims were in Nevada in 2001, up from 83 percent in 2000. Ninety eight percent of the GE company's claims were in Nevada, compared to 84 percent for the LT companies. Projections for 2002 indicate the same percentages of claims will be in Nevada.

Graph 7 shows the breakdown of claims held by respondents. Table 4 shows the claims held by respondents in the previous surveys from 1994 to 2001.

FACTORS INFLUENCING ACTIVITY

As in previous surveys, this one asked respondents to rank the factors influencing their level of exploration activity. The composite of all respondent's ranking of these factors is listed below in order of decreasing importance.

- 1. Commodity prices
- 2. Existence of favorable geology
- 3. Actual length of permitting time
- 4. Uncertainty over permitting time frames
- 5. Federal claim maintenance fees
- 6. Announcements of new discoveries
- 7. Uncertainty over mining law reform
- 8. Changes of foreign mining laws
- 9. tie Land exchanges/withdrawals Wilderness study areas/ACECs

Other factors mentioned were the existence of infrastructure and the ability to raise capital.

The ranking of factors is similar to previous years, but not identical. For all respondents, commodity prices edged out existence of favorable geology as the most important factor. Federal claim maintenance fees ranked more important than uncertainty over mining law reform. It should be pointed out that this ranking is an average of all respondent's replies. Some respondents thought certain factors were very important even though that factor may have ranked low overall.

The GE companies and LT companies differed in their rankings. For the GE companies, existence of favorable geology was the most important factor and the federal claim maintenance fees was the least important factor. For the LT companies, the federal claim maintenance fees was the third most important factor. Both the actual length and uncertainty of permitting time were relatively important factors for both GE and LT companies. Graphs 8, 9, and 10 show the

relative importance of the factors for all respondents, the GE companies, and the LT companies, respectively.

Due to the relative importance of permitting time, this year's survey again asked how long it took to get a notice of intent through the permitting process, and how long it took to get an exploration plan of operations approved. The range of times varied considerably from the averages. For a notice the time ranged from 2 weeks to 7 months. For a plan, the times ranged from 3 months to 21 months. The overall average was 2 months for a notice and 10 months for a plan. The GE companies were generally able to obtain their permits faster than the LT companies. For a notice, the GE company's average time was 1.5 months compared to 2 months for the LT companies. For a plan, the GE companies averaged 8.3 months compared to 13.5 months for the LT companies.

The permitting times actually decreased compared to the results of last year's survey. In 2000, the time required for a notice ranged from 2 weeks to 1 year with the average being 2.5 months. In 2000, approval of a plan ranged from 4 months to 5 years with the average being 13 months.

REPLACEMENT OF RESERVES

Respondents were asked whether or not they were able to replace their reserves lost to production with newly found reserves. In this question a "yes" answer indicates total replacement of reserves, and a "no" answer indicates that reserves were not totally replaced. The response from the smallest company carries the same weight as from the largest company, thus the results signify the number of companies replacing their reserves, and NOT the amount of reserves being replaced. Table 5 shows the percentages of respondents who replaced their reserves. Companies with no production were not figured into the results.

On a worldwide basis, 6 of 14 companies (43 percent) replaced their reserves. Ten companies had no worldwide production. The LT companies were more successful at worldwide reserve replacement with 3 of 6 (50 percent) replacing their reserves than the GE companies with 3 of 8 (37 percent).

In the U.S., including Nevada, only 3 of 13 companies (23 percent) replaced their reserves. Two of 7 GE companies (29 percent) replaced their reserves compared to 1 of 6 LT companies (17 percent). In Nevada, 3 of 12 companies (25 percent) replaced their reserves. Two of 7 GE companies (29 percent) replaced their reserves compared to 1 of 5 LT companies (20 percent).

The method of reserve replacement included expansions around existing operations and grass-roots efforts. Reserves may also be purchased or acquired through mergers, but those methods were not considered in this survey as they do not actually constitute new reserves. Eighty percent of the GE companies relied mainly on expansions while 75 percent of the LT companies were focused on grass roots efforts. Overall, 76 percent of all respondents' budgets were dedicated to expansion efforts compared to 24 percent dedicated to grass roots efforts. The GE companies devoted 78 percent of their budgets to expansions and 22 percent to grass roots,

while the LT companies devoted 27 percent to expansions and 73 percent to grass roots. In the previous survey, 54 percent of all respondents' budgets were devoted to expansions and 46 percent were devoted to grass roots. In general, both GE and LT companies focused more on expansions in 2001 than in 2000.

CONCERN OVER THE 43 CFR 3809 REGULATIONS

Respondents were asked to rank the impact of the 43 CFR 3809 regulations on their level of exploration activity from 1 to 5 with 1 being a little and 5 being a lot. The overall average was 2.9, indicating a moderate impact. The GE companies averaged 3.3, and the LT companies averaged 2.3.

ATTITUDES

Respondents were asked whether they were optimistic, neutral, or pessimistic about domestic exploration. Overall, 43 percent of the respondents reported being optimistic, 31 percent were neutral, and 26 percent were pessimistic. The GE companies were 40 percent optimistic, 40 percent neutral, and 20 percent pessimistic, while the LT companies were 46 percent optimistic, 23 percent neutral, and 31 percent pessimistic.

Graph 11 shows the calculated "optimism indices" for all respondents, GE companies and LT companies for the past 8 years. The optimism index is a number calculated by scoring 100 points for each optimist, negative 100 points for each pessimist, and 0 points for each of the neutral respondents. The sum of the scores divided by the number of respondents is the optimism index. The higher the optimism index, the greater the optimism. The optimism index for 2001 is higher than any previous year.

CONCLUSIONS

The respondents to this survey reported lower expenditures, employment and claims held than in 2000. Nevada exploration expenditures in 2001 were reported to be down 33 percent from 2000, and projections for 2002 show an additional 10 percent drop. Respondents reported an even larger decline in their worldwide spending with a drop of 41 percent in 2001 from 2000 levels, and a further drop of 19 percent projected for 2002. Gold and silver prices remained at relatively low levels in 2001, and commodity prices became the main factor influencing respondents' levels of activity. The percentage of respondents who have replaced reserves lost to production has dropped for the past 3 years. In spite of many downward indications, the overall optimism index is at the highest level ever.

TABLE 1

Number and Types of Respondents

Year	Companies with Budget > = \$1 million	Companies with Budget < \$1 million	Total Respondents
2001	10	14	24
2000	10	23	33
1999	13	20	33
1998	15	32	47
1997	26	25	51
1996	36	13	49
1995	24	23	47
1994	27	19	46

TABLE 2

Exploration Expenditures in Millions of Dollars

All Respondents	1995	1996	1997	1998	1999	2000	2001
Nevada	140.8	120.9	138.8	90.8	86.7	76.9	51.2
Rest of U.S.	56.2	37.4	87.6	28.5	20.6	23.5	1.9
Outside U.S.	596.5	755.8	855.6	270.3	307.3	246.0	151.2
Total World	793.5	914.1	1,082.0	389.6	414.6	346.4	204.3

Companies with Nevada budget >= \$1 million	1995	1996	1997	1998	1999	2000	2001
Nevada	137.9	120.2	134.6	86.6	83.1	72.6	49.5
Rest of U.S.	51.5	35.7	78.9	25.1	11.3	22.0	1.9
Outside U.S.	589.7	753.5	812.8	208.4	236.9	226.0	148.8
Total World	779.1	909.4	1,026.3	320.3	330.4	320.6	200.2

Companies with Nevada budget < \$1 million	1995	1996	1997	1998	1999	2000	2001
Nevada	2.9	0.7	4.2	4.0	3.5	4.3	1.7
Rest of U.S.	4.7	1.7	8.7	3.4	9.3	1.5	0.0
Outside U.S.	6.8	2.3	42.8	61.9	71.3	20.0	2.4
Total World	14.4	4.7	55.7	69.3	84.1	25.8	4.1

TABLE 3
Geologists Employed by Respondents

All Respondents	1995	1996	1997	1998	1999	2000	2001
Nevada	269	273	309	214	225	125	107
Rest of U.S.	149	NA	NA	80	48	33	11
Outside U.S.	1570	NA	NA	529	449	160	90
Total World	1988	NA	NA	823	722	318	208

Respondents with Nevada budget > = \$1 million	1995	1996	1997	1998	1999	2000	2001
Nevada	239	249	271	187	205	100	92
Rest of U.S.	139	NA	NA	40	38	14	6
Outside U.S.	1182	NA	NA	347	359	118	75
Total World	1560	NA	NA	574	602	232	173

Respondents with Nevada budget < \$1 million	1995	1996	1997	1998	1999	2000	2001
Nevada	30	24	38	27	20	25	15
Rest of U.S.	10	NA	NA	40	10	19	5
Outside U.S.	388	NA	NA	182	90	42	15
Total World	428	NA	NA	249	120	86	35

TABLE 4

Mining Claims Held by Respondents

All Respondents	1995	1996	1997	1998	1999	2000	2001
Nevada	59,504	65,929	89,833	53,292	57,466	46,112	38,075
Rest of U.S.	27,114	19,022	23,780	15,743	11,888	9,118	1,697
Total Claims	86,618	84,951	113,951	69,035	69,354	55,230	39,772

Respondents with Nevada budget > = \$1 million	1995	1996	1997	1998	1999	2000	2001
Nevada	53,069	63,349	77,683	43,584	51,729	35,289	32,696
Rest of U.S.	22,397	17,352	13,839	5,553	9,863	5,557	654
Total Claims	75,466	80,701	91,522	49,137	61,592	40,846	33,350

Respondents with Nevada budget < \$1 million	1995	1996	1997	1998	1999	2000	2001
Nevada	6,435	2,580	12,150	9,708	5,737	10,823	5,379
Rest of U.S.	4,717	1,670	9,941	10,190	2,025	3,561	1,043
Total Claims	11,152	4,250	22,091	19,898	7,762	14,384	6,422

TABLE 5

Respondents' Success at Reserve Replacement

Numbers refer to the percentage of respondents who answered "yes"

For all respondents with production:

Are you replacing your reserves	1995	1996	1997	1998	1999	2000	2001
Worldwide?	81	72	66	75	74	62	43
Domestically?	60	69	60	54	62	35	23
In Nevada?	48	60	28	43	54	47	25

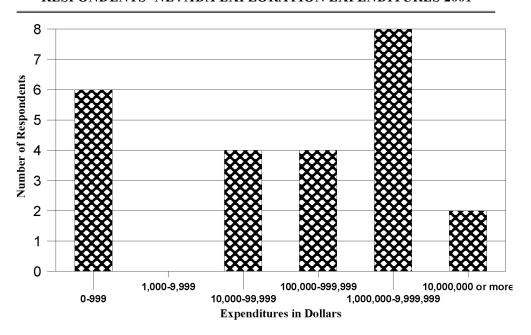
For producing respondents with Nevada exploration budget > = \$1 million:

Are you replacing your reserves	1995	1996	1997	1998	1999	2000	2001
Worldwide?	90	76	65	91	80	71	37
Domestically?	71	76	67	56	50	37	29
In Nevada?	76	70	42	50	44	44	29

For producing respondents with Nevada exploration budget < \$1 million:

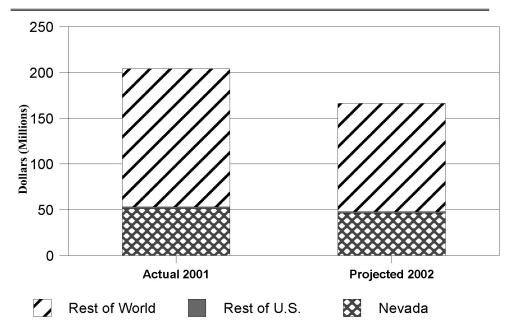
Are you replacing your reserves	1995	1996	1997	1998	1999	2000	2001
Worldwide?	67	60	67	65	67	56	50
Domestically?	43	45	55	53	80	33	17
In Nevada?	8	40	16	38	75	50	20

Graph 1
RESPONDENTS' NEVADA EXPLORATION EXPENDITURES 2001

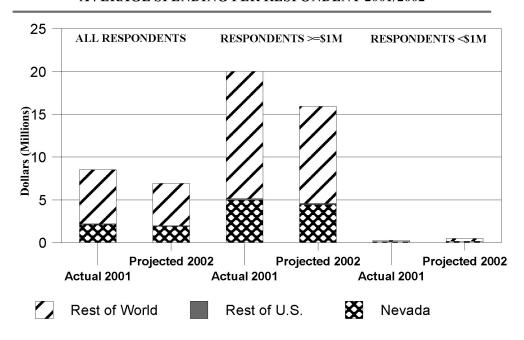


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Graph 2
TOTAL EXPLORATION SPENDING 2001/2002

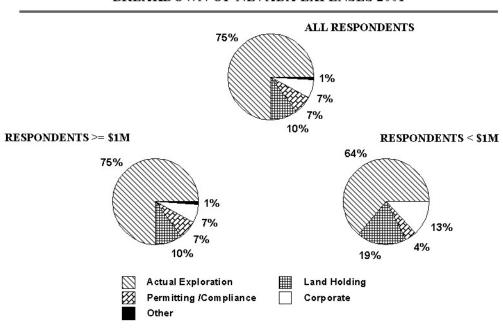


Graph 3 AVERAGE SPENDING PER RESPONDENT 2001/2002

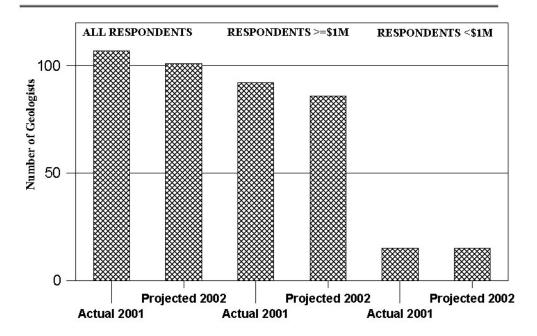


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Graph 4 BREAKDOWN OF NEVADA EXPENSES 2001

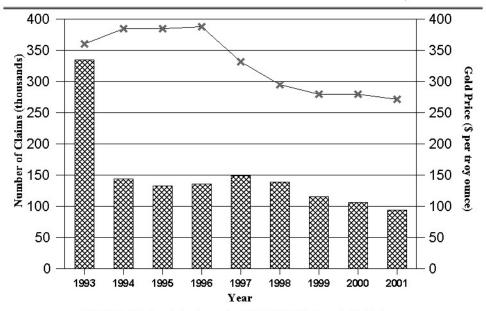


Graph 5 EXPLORATION GEOLOGISTS EMPLOYED IN NEVADA 2001/2002



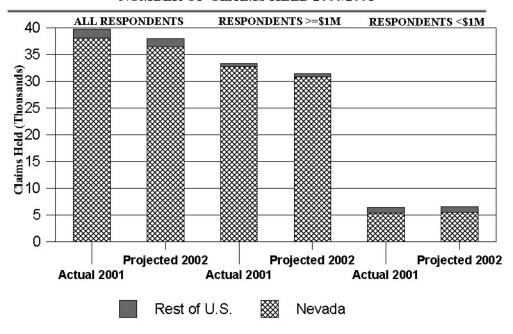
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GRAPH 6 NEVADA MINING CLAIMS AND AVERAGE GOLD PRICES, 1993-2001



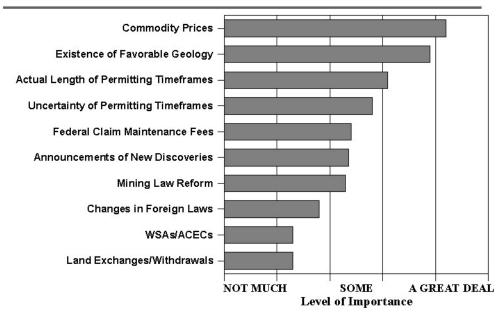
NOTE: Claim data from the BLM Public Land Statistics.

Graph 7 NUMBER OF CLAIMS HELD 2000/2001

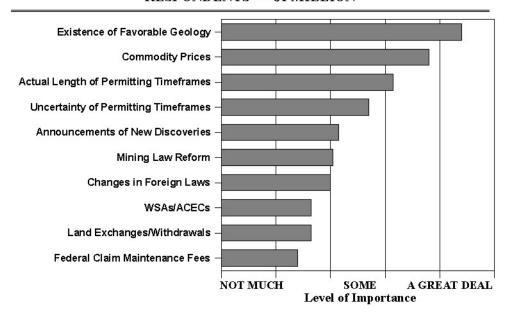


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Graph 8
FACTORS INFLUENCING ACTIVITY 2001
ALL RESPONDENTS

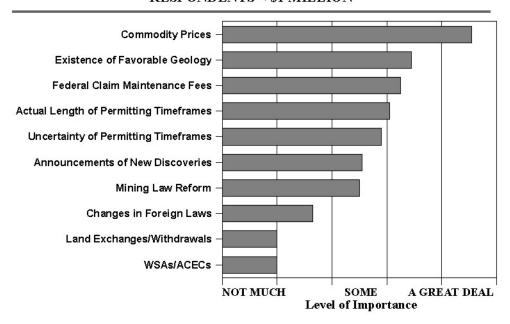


Graph 9 FACTORS INFLUENCING ACTIVITY 2001 RESPONDENTS >= \$1 MILLION

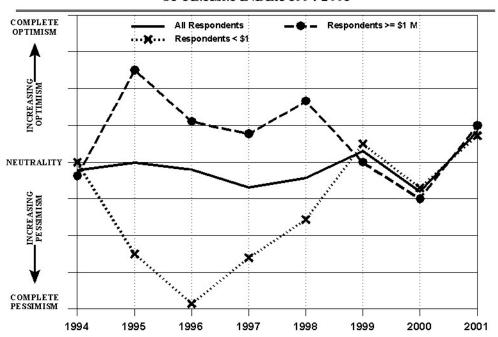


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Graph 10 FACTORS INFLUENCING ACTIVITY 2001 RESPONDENTS < \$1 MILLION



Graph 11 OPTIMISM INDEX 1994-2001



Nevada Division of Minerals Eighth Annual Exploration Survey

Con	npany Name:			
Con	tact Person / Phone:			
A.	Level of Exploration Activity	2001 Actual	2002 Planned	
	1. Total Worldwide Expenditures			
	2. Total U.S. Expenditures			
	3. Nevada Expenditures			
	4. Number of Geologists Worldwide			_
	5. Number of Geologists in U.S.			_
	6. Number of Geologists in Nevada			_
	7. Number of Claims held in U.S.			
	8. Number of Claims held in Nevada			
В.	Please estimate your Nevada exploratio percentage. Include salaries and benefi you do not know exact percentages, plea	ts within their approp	riate componen	t. If
	1. Land holding costs (claim staking/hold	ing, lease payments, etc	.)	%
	2. Permitting and compliance costs (bond	ling, reclamation, etc.)		%
	3. Corporate costs (overhead, taxes, etc.)			%
	4. Actual exploration (mapping, drilling,	interpreting, etc.)		%
	5. Other (please specify)		%
	Total		100	%
C.	Please estimate the percentage of your I to expansions around existing operation			cated
	Expansions% Gras	ss-roots efforts	%	
	(Total should equal 100 %)			

Actual length of permitting tim	2
Announcements of new discover	eries
Changes in foreign mining laws	6
Commodity prices	
Existence of favorable geology	
Federal claim maintenance fees	
Land exchanges / withdrawals	
Uncertainty over mining law re	form
Uncertainty over permitting tim	e frames
Wilderness Study Areas / ACE	Cs
Other (please specify)	
General questions. (Please circle your r	esponse)
 Are you replacing your worldwide prod with new worldwide reserves? 	uction Yes No N/A
2. Are you replacing your U.S. production new U.S. reserves?	with Yes No N/A
3. Are you replacing your Nevada product with new Nevada reserves?	ion Yes No N/A
4. How do you feel about domestic explor	ation? Optimistic Neutral Pessi
5. With 1 being a little and 5 being a lot, h much impact have the new 43 CFR 380 regulations had on your Nevada explora	9 1 2 3 4 5
6. Estimated time required to get approval	for:

Please return this survey to the Nevada Division of Minerals, 400 W. King Street, Ste 106, Carson City, NV 89703, or fax it to (775) 684-7052. Thank you. All individual responses will be held confidential.